

1471. MEDICAGO SATIVA.**Alfalfa.**

From France. Received through Mr. W. T. Swingle, December, 1898. (9 packages.)

"Luzerne rustique" (hardy lucern).

"*Medicago falcata-sativa*."

"Perennial, intermediate between the ordinary lucern and the Swedish lucern (*M. falcata*); very vigorous, very hardy, accommodating itself better than the cultivated or ordinary lucern to mediocre, dry, and shallow soils and to arid lands; but it is somewhat later and does not come up again so quickly; appreciated in certain localities in Germany, where it has begun to spread." (*Vilmorin*.)

The seed weighs 58 to 62 pounds per bushel; 18 to 22 pounds is sown per acre.

1472. MEDICAGO LUPULINA.**Black medic.**

From France. Received through Mr. W. T. Swingle, December, 1898. (8 packages.)

"Luzerne lupuline." "Minette."

"An annual or biennial clover, widely grown as a pasture plant in wet meadows and on stiff, clayey soils which are too poor to grow alfalfa or clover. On rich, moist soil it sometimes makes an enormous growth, but ordinarily its growth is in pastures. It is sometimes recommended to be sown mixed with white clover for lawns, as it remains green through the driest summers." (*Jared G. Smith*.)

"Biennial; cultivated alone or mixed with grains, also with clover or other plants. Forage fine, of good quality; used also like clover on lands of mediocre quality, arid, calcareous, chalky, or sandy; pasture early, very good for sheep. It can not be mown, but after pasturing it comes up rapidly under the teeth of the animals. To be sown with the March cereals; in the South it may be sown in September or October." (*Vilmorin*.)

The seed weighs 58 to 62 pounds per bushel; 13 to 18 pounds is required per acre.

1473. MADIA SATIVA.**Madia.**

From France. Received through Mr. W. T. Swingle, December, 1898. (9 packages.)

"Madia du Chile."

"A rank-growing annual, native of both Chile and California, which has been recommended as furnishing an excellent summer sheep forage. The leaves are clammy, with a viscid exudation, and the plant has a rank odor. Its chief merit is its rapid growth. It is cultivated in the arid Southwest and California and makes a palatable and nutritious food for sheep. An excellent lubricating oil is extracted from the seeds." (*Jared G. Smith*.)

"Annual. Very good plant to plow under as green fertilizer. Good pasture for sheep, which accommodate themselves also very well to the dry straw after the removal of the seeds, which are oleaginous.

"The *Madia sativa* is quite hardy, resisting the winter, especially in wholesome and light soils lying southward. It is able to bear drought, but it shuns cold and damp soils. It is an early plant of a rapid growth, productive of seed, not very choice as to the quality of its territory and meriting cultivation in spite of its strong, disagreeable odor and the viscous nature of its leaves, inconveniences of small importance which may even become advantageous in keeping off the insects. To be sown from the middle of March to the beginning of June, or also in autumn, especially in the South." (*Vilmorin*.)

The seed weighs 35 to 39 pounds per bushel; 7 to 9 pounds per acre is required if sown in rows, and 16 to 18 pounds if broadcast.

1474. MELILOTUS OFFICINALIS.**Hungarian melilot.**

From France. Received through Mr. W. T. Swingle, December, 1898. (11 packages.)

"Mélilot grand des bois" (large wood melilot). "Mélilot de Hongrie."

"*Melilotus linearis* Poir."

"Biennial, productive, succeeds in poor lands but especially on such as are fertile and humid, along streams and rivers, etc.; quality of forage contested." (*Vilmorin*.)

Twenty-two pounds is generally sown per acre.